



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,245	04/20/2004	Tomohide Usami	12-045	2546
23400	7590	07/05/2007	EXAMINER	
POSZ LAW GROUP, PLC 12040 SOUTH LAKES DRIVE SUITE 101 RESTON, VA 20191			WHIPKEY, JASON T	
		ART UNIT	PAPER NUMBER	
		2622		
		MAIL DATE	DELIVERY MODE	
		07/05/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/827,245	USAMI, TOMOHIDE	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jason T. Whipkey	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-11 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 April 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

*Specification*

1. The abstract of the disclosure is objected to because it begins with the phrase, "It is an object of the present invention ...". Correction is required. See MPEP § 608.01(b).

*Claim Objections*

2. Claims 8-11 are objected to because of the following informalities:

In each of claims 8-11 on line 5, "a vibrations" should probably read -- vibrations --.

Appropriate correction is required.

*Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 8-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 8-11 each recite the limitation “said screen” on line 4. There is insufficient antecedent basis for this limitation in the claim. For examination purposes, the claims will be treated as if they read, “a screen”.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Okawa (Japanese Patent Publication No. 11-331681).

Regarding **claim 1**, Okawa discloses a vehicle-mounted camera apparatus (see Drawing 6 in the provided computer translation), comprising:

a camera (image pick-up equipment 1A; see page 7, lines 44-46)

mounted on a vehicle (see page 7, lines 40-43);

a vibration detector (acceleration sensor 7 measures vibration; see page 6, lines 38-45) provided on a body (see page 7, lines 16-16-20), a frame or a suspension of said vehicle so as to detect vibration transferred to said vehicle;

an image motion blur corrector (image amendment circuit 5) for correcting a motion blur in an image captured by said camera based on

vibrations detected by said vibration detector (as shown in drawings 1 and 2, circuit 5 corrects the effects of vibration by reading an area out of memory in accordance with an output from acceleration sensor 7; see page 5, lines 30-34); and

a display controller for displaying an image corrected by said image motion blur corrector (since the system includes a monitor [see page 5, lines 41-44], it is inherent that some sort of controlling circuitry is associated with it).

Regarding **claim 8**, Okawa discloses:

said image motion blur corrector determines an amount and direction of a motion blur in an image displayed on said screen that corresponds to the image captured by said camera based on vibrations detected by said vibration detector (see page 5, lines 30-34), and

changes an area to be displayed on said screen, within an image captured by said camera, according to said amount and direction of a image motion blur (see page 6, lines 5-9).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2622

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okawa in view of Minowa (U.S. Patent Publication No. 2001/0008989).

**Claim 3** can be treated like claim 1. However, Okawa is silent with regard to providing the vibration detector on a suspension of the vehicle.

Minowa discloses a vehicle with a mounted camera that corrects for vibrations using a signal from acceleration sensor 104 (see paragraph 60). A suspension control sensor can be used as acceleration sensor 104 (see paragraph 61). As stated in paragraph 61, an advantage of doing so is that costs can be reduced. For this reason, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Okawa's system use the acceleration sensor on the vehicle's suspension.

Okawa is also silent with regard to placing the camera in the vicinity of the sensor.

Official Notice is taken that it was well known in the art at the time the invention was made to place an acceleration sensor (for motion-correction purposes) and a camera as close to each other as possible. An advantage of doing so is that the sensor can detect the vibrations felt by the camera accurately. For this reason, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Okawa's system place the camera in the vicinity of the sensor.

9. Claims 2, 4-7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okawa in view of Minowa and Bethell.

**Claim 2** can be treated like claim 1. However, Okawa is silent with regard to providing the vibration detector on a suspension of the vehicle.

Minowa discloses a vehicle with a mounted camera that corrects for vibrations using a signal from acceleration sensor 104 (see paragraph 60). A suspension control sensor can be used as acceleration sensor 104 (see paragraph 61). As stated in paragraph 61, an advantage of doing so is that costs can be reduced. For this reason, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Okawa's system use the acceleration sensor on the vehicle's suspension.

Minowa is silent with regard to the sensor detecting variation of force applied to a piston rod of a shock absorber to detect the vehicle's vibration.

Bethell discloses a shock absorber (see Figure 2) that detects motion of a piston rod (46) using a sensor (transducer 66) in order to detect the motion transmitted to the frame of a vehicle's body (see column 1, lines 14-23, and column 6, lines 25-39).

An advantage of detecting vibration using a sensor on a shock absorber's piston rod is that the motion of the piston rod can be measured relative to its cylinder, thus providing a frame of reference to measure the actual vibrations felt by the body. For this reason, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Minowa's system detect the motion of a shock absorber's piston rod, as described by Bethell.

Regarding **claim 4**, Okawa is silent with regard to placing the camera in the vicinity of the sensor.

Official Notice is taken that it was well known in the art at the time the invention was made to place an acceleration sensor (for motion-correction purposes) and a camera as close to

each other as possible. An advantage of doing so is that the sensor can detect the vibrations felt by the camera accurately. For this reason, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Okawa's system place the camera in the vicinity of the sensor.

**Claim 5** can be treated like claim 1. However, Okawa is silent with regard to providing the vibration detector on a suspension of the vehicle.

Minowa discloses a vehicle with a mounted camera that corrects for vibrations using a signal from acceleration sensor 104 (see paragraph 60). A suspension control sensor can be used as acceleration sensor 104 (see paragraph 61). As stated in paragraph 61, an advantage of doing so is that costs can be reduced. For this reason, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Okawa's system use the acceleration sensor on the vehicle's suspension.

Minowa is silent with regard to the sensor being used to control damping force of a shock absorber.

Bethell discloses a shock absorber (see Figure 2) that detects motion of a piston rod (46) using a sensor (transducer 66) in order to control the suspension characteristics of the vehicle (see column 1, lines 14-23, and column 6, lines 25-39).

An advantage of detecting vibration using a sensor for controlling the damping force of a shock absorber is that a feedback system can be created, producing a smoother ride. For this reason, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Minowa's system use a sensor that control the damping force of a shock absorber, as described by Bethell.

Art Unit: 2622

Regarding **claims 6 and 7**, Minowa is silent with regard to the sensor being used to control damping force of a shock absorber.

Bethell discloses a shock absorber (see Figure 2) that detects motion of a piston rod (46) using a sensor (transducer 66) in order to control the suspension characteristics of the vehicle (see column 1, lines 14-23, and column 6, lines 25-39).

An advantage of detecting vibration using a sensor for controlling the damping force of a shock absorber is that a feedback system can be created, producing a smoother ride. For this reason, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Minowa's system use a sensor that control the damping force of a shock absorber, as described by Bethell.

Regarding **claims 9-11**, Okawa discloses:

    said image motion blur corrector determines an amount and direction of a motion blur in an image displayed on said screen that corresponds to the image captured by said camera based on vibrations detected by said vibration detector (see page 5, lines 30-34), and

    changes an area to be displayed on said screen, within an image captured by said camera, according to said amount and direction of a image motion blur (see page 6, lines 5-9).

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.
  
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Whipkey, whose telephone number is (571) 272-7321. The examiner can normally be reached Monday through Friday from 9:00 A.M. to 5:30 P.M. eastern daylight time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava, can be reached at (571) 272-7304. The fax phone number for the organization where this application is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JTW  
JTW  
June 15, 2007



VIVEK SRIVASTAVA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600